

International School

**Capstone Project 2**

CMU-SE 451

**Product Backlog**

**Version 2.0**

**Date: 19/03/2021**

**ViVu - The smart travel system supports with chatbot and short video social network**

**Submitted by**



**Approved by Nguyen Duc Man**

**Proposal Review Panel Representative:**

Name Signature Date

**Capstone Project 2- Mentor:**

Name Signature Date

**PROJECT INFORMATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project acronym** | ViVu | | |
| **Project Title** | The Smart Travel System Supports With ChatBot And Short Video Social Network | | |
| **Start Date** | 24 Aug 2020 | **End Date** | 6 Jun 2021 |
| **Lead Institution** | International School, Duy Tan University | | |
| **Project Mentor** | Man, Nguyen Duc, M.Sc. | | |
| **Scrum master / Project Leader & contact details** | Sang, Nguyen Thanh  Email: thanhsang3111999.ntb@gmail.com  Tel: 0344684069  ID: 23211212363 | | |
| **Partner Organization** |  | | |
| **Project Web URL** |  | | |
| **Team members** | Name | Email | Tel |
| 2321121321 | Tuan, Doan Kim | doantuan21101999@gmail.com | 0913622928 |
| 2321124963 | Loc, Phung Hoang Phu | phunghoangphuloc@gmail.com | 0912698173 |
| 2321125061 | Thuyen, Pham Van | phamvanthuyen2802@gmail.com | 0795697332 |

REVISION HISTORY

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Comments** | **Author** | **Approval** |
| 1.0 | 07/09/2020 | Initial Release | All members |  |
| 1.1 | 15/09/2020 | Update Story Point | All members |  |
| 2.0 | 19/03/2021 | Update Version 2 | All member |  |

# **Document Approvals**

The following signatures are required for approval of this document.

|  |  |  |
| --- | --- | --- |
| Msc Man, Nguyen Duc  Mentor |  | Date |
| Sang, Nguyen Thanh  Scrum master, DevTeam |  | Date |
| Tuan, Doan Kim  Product Owner, DevTeam |  | Date |
| Thuyen, Pham Van  DevTeam |  | Date |
| Loc, Phung Hoang Phu  DevTeam |  | Date |

**TABLE OF CONTENTS**

[**Document Approvals** 2](#_Toc72942403)

[**1. Introduction** 4](#_Toc72942404)

[**1.1** **Purpose** 4](#_Toc72942405)

[**1.2** **Scope** 4](#_Toc72942406)

[**1.3** **References** 4](#_Toc72942407)

[**2. Product Backlog Specification** 5](#_Toc72942408)

[**3. Challenges** 12](#_Toc72942409)

[**4. Stakeholders and User Description** 12](#_Toc72942410)

# 

# **1. Introduction**

The agile product backlog in Scrum is a prioritized features list, containing short descriptions of all functionality desired in the product. When applying Scrum, it’s not necessary to start a project with a lengthy, upfront effort to document all requirements. Typically, a Scrum team and its product owner begin by writing down everything they can think of for agile backlog prioritization. This agile product backlog is almost always more than enough for a first sprint. The Scrum product backlog is then allowed to grow and change as more is learned about the product

## **Purpose**

* Provide a prioritized features list, containing a short description of all functionality desired in the product.
* Lists everything that the product owner and Scrum team feels should be included in the software they are developing.

## **1.2 Scope**

* Lists the user’s role.
* Write all the user’s requirements.
* Lists some main functions of the system.
* Short description of all the functionality desired in the product.
* Given the priority of each feature and function of the product.

## **1.3 References**

|  |  |  |
| --- | --- | --- |
| **No** | **Source** | **Note** |
| 1 | <https://www.visual-paradigm.com/scrum/what-is-product-backlog-in-scrum/> | What is Product Backlog in Scrum? Who Responsible for It? |
| 2 | <https://www.scrum-institute.org/The_Scrum_Product_Backlog.php> | The Scrum Product Backlog - International Scrum Institute |

# **2. Product Backlog Specification**

***Priority and Estimates***

Priorities are set from high (H), medium (M) and low (L):

* Priorities of some user stories can be the same with others.
* If a user story has dependencies, it must have lower priority than its dependencies

**VERSION 1: viBOTour - Smart Chatbot for Tourist 4.0**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Points** |
| PB01 | Tourist | Authenticate account information to use the app. | I can access the system to accomplish my goals | M | 20 |
| PB02 | Tourist | View tour list | I can decide on my own tour | M | 8 |
| PB03 | Tourist | View details for each tour | I can know where I am going on my trip | M | 7 |
| PB04 | Tourist | Chat with Chatbot on mobile application | I can chat with chatbot to learn more about my travel | H | 25 |

***Table 1: Product Backlog Specification***(Sprint 1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB05 | Tourist | Book tour on app | I can book my favorite tour in the app | H | 5 |
| PB06 | Tourist | View shopping cart on app | I can check the trip information in the shopping cart, trip list, quantity and unit price set | H | 8 |
| PB07 | Tourist | Pay tour on app | I can choose the form of payment, enter promotions, pay right with the amount shown | M | 25 |
| PB08 | Tourist | Interact with chatbot to receive suggested tourist attractions. | I can interact with chatbot on the app about travel places. | H | 40 |
| PB09 | Tourist | Find and book a tour with chatbot. | I can find all tours and book there in the chatbot. | H | 13 |
| PB10 | Tourist | Receive notification for tourist app | I can receive notifications | L | 8 |

***Table 2: Product Backlog Specification***(Sprint 2)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB11 | Admin, Staff or Manager | Authenticate account in the website | I can login as my role, use the functions and log out of the system. | H | 5 |
| PB12 | Admin, Staff or Manager | View list tour on the website | I can know the displayed tour information | L | 5 |
| PB13 | Admin, Staff or Manager | View tour detail on the website | I can know more details about that tour schedule | H | 3 |
| PB14 | Admin | Send mail invite into the system | I can email an employee or manager to upgrade the permissions of that account | H | 8 |
| PB15 | Tourist | Search tour on the app | I can find tours by name, location, cost. | H | 8 |
| PB16 | Tourist | Suggest tour schedule on app | I can get some suggestions for the tour schedule that works for me | H | 40 |

***Table 3: Product Backlog Specification***(Sprint 3)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB17 | Staff | Manage all promotions in the system. | I can change promotion data. | L |  |
| PB18 | Staff | Manage all tours in the system | I can control the list of tour information in the system | M |  |
| PB19 | Admin | Manage all user accounts in the system | I can access all user accounts in the system | M |  |
| PB20 | Tourist | The chatbot integrated weather data. | I can get travel suggestions based on weather conditions | H |  |
| PB21 | Tourist | Manage my profile information. | I can change personal information and my password. | L |  |

***Table 4: Product Backlog Specification***(Sprint 4)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB22 | Tourist | View promotions | I can see the latest promotions | L |  |
| PB23 | Tourist | Chat with Chatbot on the web | I can chat with Chatbot on the web to learn more about my travel | H |  |
| PB24 | Tourist | Check paid tour | I can check out buying tour | M |  |
| PB25 | Tourist | View the tours that on are most interested | I can see the most popular tours | M |  |
| PB26 | Manager | View report from tourist | I can see reports from tourist | M |  |

***Table 5: Product Backlog Specification***(Sprint 5)

**VERSION 2: ViVu - The smart travel system supports with chatbot and short video social network**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB27 | Tourist | The social network | I can share the travel moments to the family, friends, | H |  |
| PB28 | Tourist | Create, upload short video, story video on the social network | I can customize various story videos to share | H |  |
| PB29 | Tourist | Emotional interaction in story video | I can interact emotionally on the videos of friends, family, | M |  |
| PB30 | Tourist | Comment on the short video, story video on the social network | I can comment, rate and analyze the videos on the social networks. | M |  |
| PB31 | Tourist | Scan the ticket code | I can pay for the travel | H |  |
| PB32 | Tourist | The tourist destination map | I can track the schedule and destination to travel | M |  |
| PB33 | Tourist | View the promotion for the travel | I can use promotions to reduce travel costs | H |  |
| PB34 | Tourist | Customize the schedule | I can recommend, rate the places that the tourists can visit | M |  |

***Table 6: Product Backlog Specification***(Sprint 1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB35 | Tourist | Interact with the tour guide | I can send, receive the message with the tour guide | H |  |
| PB36 | Tourist | Gain social points | I can earn points by posting moments on social media | H |  |
| PB37 | Tourist | Digital wallet or electronic wallet | I can easily pay for services, and use promotions | M |  |
| PB38 | Tourist | Review the history post-interaction | I can review the history of interactions on the application for easy follow-up | M |  |

***Table 7: Product Backlog Specification***(Sprint 2)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB40 | Tourist | Track activities of friends, family on the social network | I want to know where my relatives, friends, family are traveling | H |  |
| PB41 | Tourist | To be recommend interesting videos | I can watch interesting story video on the travel social network | H |  |
| PB42 | Tourist | Ignore the videos, content that are not suitable | I can keep track of content, story video that are healthy, relevant to my interests. | H |  |
| PB43 | Tourist | Report the harmful video, malicious videos | I can report malicious videos to the administrator so they can remove them | H |  |
| PB44 | Tourist | Receive notification about the interesting travel | I can follow interesting travel, new travel that match my location | H |  |

***Table 8: Product Backlog Specification***(Sprint 3)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB45 | Manager | Manage all the user vouchers and the promotions | I can create, update, delete the promotion and manage user vouchers | H |  |
| PB46 | Manager | Manage all the post, story video, short video | I can update, delete the posting, harmful video, malicious video | H |  |
| PB47 | Manager | Manage user bonus points | I can create, update, delete the bonus points of users | H |  |
| PB48 | Manager | Manage all user messages | I can follow the messages between the tour guide and the user so that I can provide timely assistance | H |  |

***Table 9: Product Backlog Specification***(Sprint 4)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB26 | User | see things that my followers share | I can interact with them | M |  |
| PB27 | User | view videos, articles suggested by the system | I can passively watch many videos related to my interest | L |  |
| PB28 | Admin | block videos, posts that violate community standards | The social network I manage is more secure | H |  |
| PB29 | User | report videos, posts that violate community standards | I can submit my report to the content review moderator | M |  |
| PB30 | User | receive information from the app | I can receive activity notifications as well as notes from the system | M |  |

***Table 10: Product Backlog Specification***(Sprint 5)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **As a <type of user>** | **I want to <perform some task>** | **so that I can <achieve some goal>** | **Priority**  **(H, M, L)** | **Story Point** |
| PB31 | Admin | manage all vouchers in app | I can add, edit, view, and delete every voucher | M |  |
| PB32 | Admin | manage post of each user | I can add, edit, view, and delete the post | M |  |
| PB33 | Admin | manage accumulated points of each user | I can use that to come up with strategies in the future | L |  |
| PB34 | User | have a list of my own message manager | I can add, view, and delete my chats | L |  |

***Table 11: Product Backlog Specification***(Sprint 6)

# **3. Challenges**

|  |  |  |
| --- | --- | --- |
| **No.** | **Challenge** | **Condition** |
| 1 | Time | The project must be completed within 22 weeks. |
| 2 | Budget | Budget limit $3312 |
| 3 | Human Resources | Team limit with 4 members and 1 mentor develops the system. |
| 4 | Technical | Apply many new current technique |
| 5 | Requirements | Follow owner requirements and market |

# **4. Stakeholders and User Description**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Name** | **Description** | **Role** |
| 1 | Tourists | Main users who will choose tours, book and pay online. | Interact with the application include: search places, book tour, pay it and communicate with chatbot |
| 2 | Staffs | Staffs of travelling organization | Manage and control tours and promotions of the system |
| 3 | Manager | Manager of travelling organization | View profit reports |
| 4 | Admin | System administrator | Manage all user accounts, backup data and maintain the system |